

CANCELLED CLAIMS

Please cancel claims 1-6, 8-12, and 14-19.

AMENDMENTS TO THE CLAIMS

Please amend claims 7, 13, and 20 to read as follows:

Sub 1

7. (amended) A heat sink for cooling a component, the heat sink comprising:

a tubular body having an interior surface and an exterior surface, at least a portion of the exterior surface being substantially flat and contacting the component to remove heat from the component; and

a1

a plurality of internal fins extending from the interior surface of the tubular body; wherein the heat sink has a mounting ridge for mounting a clip to hold the component against the substantially flat portion of the tubular body.

Sub 2

13. (amended) A heat sink assembly for cooling a component on a circuit board, the heat sink assembly comprising:

a tubular body having an interior surface and an exterior surface, at least a portion of the exterior surface being substantially flat and contacting the component to remove heat from the component;

a2

a plurality of internal fins extending from the interior surface of the tubular body; and

a fan adjacent to one of the two open ends of the tubular body to force ambient air through the tubular body;

wherein the tubular body has a mounting ridge for mounting a clip to hold the component against the substantially flat portion of the tubular body.

Sub 1  
20. (amended) A cooktop comprising:

- A3
- a cooking plate;
  - a plurality of heating units mounted below the cooking plate;
  - a controller housing unit mounted below the cooking plate;
  - a circuit board for controlling the heating units, the circuit board having a plurality of components, the circuit board mounted inside the controller housing unit;
  - a heat sink assembly for cooling the plurality of components of the circuit board, the heat sink assembly attached to the circuit board, the heat sink mounted inside the controller housing unit, the heat sink assembly having
    - a tubular body having an interior surface, an exterior surface and two open ends;
    - a plurality of internal fins extending from the interior surface of the tubular body; and
    - a fan adjacent to one of the two open ends of the tubular body to force ambient air through the tubular body;
  - wherein the exterior surface of the tubular body contacts the plurality of components to remove heat from the components; and
  - wherein the tubular body has a mounting ridge for mounting a plurality of clips to hold the plurality of components against the exterior surface of the tubular body.

#### NEW CLAIMS

Please add the following new claims:

Sub 1  
A4  
21. (new) A heat sink for cooling a component, the heat sink comprising:

- a tubular body having an interior surface and an exterior surface, a portion of the exterior surface being substantially flat;
- a plurality of internal fins extending from the interior surface of the tubular body;
- and
- a mounting ridge for attaching the component such that the component is in contact with the substantially flat portion of the exterior surface.

22. (new) The heat sink of claim 21, wherein the internal fins are arranged in a plurality of sets, with the internal fins of each set extending in parallel to varying lengths.

23. (new) The heat sink of claim 22, wherein the internal fins are generally symmetric around a center line of the tubular body.

24. (new) The heat sink of claim 23, wherein the fins in a center of a set are longer than the fins at an edge of a set.

25. (new) The heat sink of claim 21 further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.

26. (new) The heat sink of claim 25 further comprising a fan positioned adjacent to an open end of the tubular body.

27. (new) A heat sink for cooling a component, the heat sink comprising:  
a tubular body having an interior surface and an exterior surface, a portion of the exterior surface being substantially flat for contacting the component; and  
a plurality of internal fins, arranged in a plurality of sets, extending in parallel to varying lengths from the interior surface of the tubular body.

28. (new) The heat sink of claim 27, wherein the internal fins are generally symmetric around a center line of the tubular body.

29. (new) The heat sink of claim 28, wherein the fins in a center of a set are longer than the fins at an edge of a set.

30. (new) The heat sink of claim 27 further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.

31. (new) The heat sink of claim 30 further comprising a fan positioned adjacent to an open end of the tubular body.

32. (new) A cooktop comprising:

- a cooking plate;
- a plurality of heating units mounted below the cooking plate;
- a controller housing unit mounted below the cooking plate;
- a circuit board, mounted inside the controller housing unit, for controlling the heating units, the circuit board having a plurality of components; and
- a heat sink attached to the circuit board for cooling the plurality of components, the heat sink comprising:
  - a tubular body having an interior surface and an exterior surface, a portion of the exterior surface being substantially flat;
  - a plurality of internal fins extending from the interior surface of the tubular body; and
  - a mounting ridge for attaching the components such that the components are in contact with the substantially flat portion of the exterior surface.

33. (new) The cooktop of claim 32, wherein the internal fins are positioned in a plurality of sets, with the internal fins in each set extending in parallel to varying lengths.

34. (new) The cooktop of claim 33, wherein the internal fins are generally symmetric around a center line of the tubular body.

35. (new) The cooktop of claim 34, wherein the fins in a center of a set are longer than the fins at an edge of a set.

36. (new) The cooktop of claim 32 further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.

37. (new) The cooktop of claim 36 further comprising a fan positioned adjacent to an open end of the tubular body.

38. (new) A cooktop comprising:

a cooking plate;

a plurality of heating units mounted below the cooking plate;

a controller housing unit mounted below the cooking plate;

a circuit board, mounted inside the controller housing unit, for controlling the heating units, the circuit board having a plurality of components; and

a heat sink attached to the circuit board for cooling the plurality of components, the heat sink comprising:

a tubular body having an interior surface and an exterior surface, a portion of the exterior surface being substantially flat for contacting the component; and

a plurality of internal fins, arranged in a plurality of sets, extending in parallel to varying lengths from the interior surface of the tubular body.

39. (new) The cooktop of claim 38, wherein the internal fins are generally symmetric around a center line of the tubular body.

40. (new) The cooktop of claim 39, wherein the fins in a center of a set are longer than the fins at an edge of a set.

41. (new) The cooktop of claim 38 further comprising a plurality of exterior fins extending from the exterior surface of the tubular body.

42. (new) The cooktop of claim 41 further comprising a fan positioned adjacent to an open end of the tubular body.

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